

Pre-Operations Report

Operation Name: Common Meadows
County: Tillamook
Management Basin: North Fork Nehalem

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	PC	99	79
2	PC	220	154
Total		319	233

1. The net acres are based on orthophotos and GIS and exclude roads, stream buffers, and reserve areas and non-required thinning areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have a northern aspect and range from 0% to 60%. Elevations range from 520 to 1620 feet. The major soil type is Killam.

The landform is moderate to steep slopes around the headwaters of several tributary streams to Gods Valley Creek north of the west end of Rector Ridge. The underlying rocks are a mix of sedimentary origin Keasey Formation Jewell Member & Roy Creek Member of the Astoria Formation and igneous origin flow of the Tillamook Volcanics.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information⁴

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	PC	103	WH,DF, RA	50-55	13.5	265	268	54	79
		Target ³	WH,DF, RA	50-55	16.0	127	91	24	79
2	PC	104	WH,DF, SS	45-50	12.6	213	247	60	154
		Target ³	WH,DF, SS	45-50	14.3	101	91	27	154

1. The source of stand inventory information is from field reconnaissance cruise plots taken in 2005

2. The net acres are based on orthophotos and GIS and exclude roads, stream buffers, and reserve areas and non-required thinning.

3. The Target identifies expected stand characteristics (DBH, BA, TPA and SDI) after harvesting has been completed.

4. These numbers are based on plot data taken to this point and final numbers may differ significantly from the actual conditions significantly. The directive for minor and major modifications will be followed for further review.

A portion of Area 1 was planted in 1965 but has a lot of natural hemlock regeneration which has created a stand that has large patches of small dense hemlock and Douglas-fir and smaller patches of large hemlock that were more open grown. Area 2 was planted in 1970 and has also had natural regeneration which has resulted in small pockets of dense hemlock intermixed with the planted Douglas-fir. Both of these stands are primarily small conifer stands that have had no prior stand management. There is scattered spruce and stringers of alder throughout the sale areas. In the majority of these stands there is very little understory. The understory that is there is comprised of sword fern and salmonberry. Live crown ratios are at about 40% but the growth for both areas have been slowing down for the last few years. The Douglas-fir shows symptoms of Swiss Needle Cast but still have good live crown ratios. Both the Douglas-fir and hemlock are becoming overstocked which will ultimately result in the loss of live crown ratios, slowed diameter growth, and reduced understory growth.

Area 1 has been inventoried using the Stand Level Inventory (SLI) procedure and the stand has been identified as CSC (61 acres) and UDS (16 acres). Area 2 has been inventoried using the SLI and the stand has been identified as UDS.

Down wood, in all of the sale areas, consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some windthrow and suppression mortality in decay classes 1 and 2. SLI measurements show that the down wood level in decay classes 1 and 2 is 85 cubic feet per acre in Area 1, and an average of 890 cubic feet per acre in Area 2. Total down wood levels in Area 1 is 4700 cubic feet per acre, and an average of 3857 cubic feet per acre in Area 2. There was no down wood greater than 24 inches on the large end in decay classes 0, 1, and 2, recorded for Area 1 but in Area 2 there is approximately 1.5 per acre.

In all of the sale areas there are some large snags in various states of decay and some hard snags created from wind and snow damage. SLI showed that Area 1 has 5 snags per acre and Area 2 has an average of 1 snag per acre greater than 12 inches DBH. An average of 2 snags per acre is greater than 24 inches DBH in these two areas. In Area 1, there were less than 1.5 snags per acre that were greater than 15 inches DBH and in decay classes 0, 1, and 2. In Area 2, there were no snags recorded that were greater than 15 inches DBH and in decay classes 0, 1, and 2.

III. DESIRED STAND CONDITION and VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Desired Future	Net Acres
1	103	CSC	UDS	GENERAL LYR	17 62
2	104	CSC	UDS	GENERAL LYR	83 71

1. The stand is expected to develop into this condition in the five to ten years after this operation is completed except in REG stands which occur after harvest.

See Section IV: Proposed Management Prescription for more information on Green Tree, Down Wood, and Snag Strategies during operation. Also refer to Landscape Design in the Summary document for more information on strategies to move the district toward Desired Future Condition goals.

Vision:

Area 1 and 2: The desired future conditions for these stands are LYR with a portion of the stands designated as General. This stand is a mix of conifer with some hardwood species (see current stand condition) which will provide for future opportunities to potentially move both these stands towards a LYR structure. Partial cutting these stands will maintain individual tree growth and good live crown ratios while promoting understory development. This combined with variable density patches and pockets of alder will create both horizontal and vertical diversity that will help move this stand towards complex structure. In 15 to 20 years, this stand will be assessed for management opportunities to move this stand towards a LYR structure or to maintain LYR structure.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND ANTICIPATED PATHWAY:

The prescriptions described below are based on the current stand condition such as overall tree and stand growth, species mix, stand density, and stand health.

See table 2 for prescription targets

Partial Cut:

Area 1: A diameter limit (approx. 14" DBH) will be used to harvest the hemlock and Douglas-fir that has poor height to diameter ratios and poor crown ratios. The remaining hemlock and Douglas-fir will be thinned to a basal area range of 140ft² to 160ft² in order to maintain good live crown ratios in the dominant trees and promote understory growth. All other conifer and hardwood species will be reserved. An alder prescription (example: thinning alder) may be considered for

this area and will be looked at during sale preparation. This harvest prescription is designed to achieve variable densities throughout the area.

Area 2: Thin the Douglas-fir and hemlock to a basal area range of 100ft² to 120ft² in order to maintain good live crown ratios and promote understory growth. All other species will be reserved. This partial cut will open up the canopy and allow for additional growth for existing trees..

Green Tree, Down Wood and Snag Strategies

See also Section III: Desired Future Condition for long term strategies

Existing down wood will be left in the sale areas. Down wood recruitment is expected through mortality and windthrow of residual or leave trees, felled snags and tops left during harvest. Small non-merchantable hardwood and conifer will be retained where possible in harvest units with the expectation they will become short term snags and down wood. Tops resulting from ground yarding will be left in the units.

Existing snags not determined to be a safety hazard will be retained and any felled snags will be left for down wood. Creation of snags is expected during harvest activities rub trees, lift trees, and tail trees and over time by natural processes.

During sale preparation, different options, for Areas 1 and 2, such as down wood and snag creation, additional green tree retention, and future stand management and monitoring will be considered in order to achieve future FMP targets.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
95%	5%	<input type="checkbox"/>	x
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	2288	0	2288
Stumpage Value (\$/MBF) *	\$145	0	
Estimated Gross Value	\$331,760	0	\$331,760
		Project Costs:	\$120,000
		Estimated Net Value:	\$211,760

**Combined Douglas-fir and hemlock stumpage values based on harvest type.*

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via Gods Valley County Road, Rector Ridge Road, and Crawford Road. These are currently all weather crushed rock roads. See maps for specific road locations and conditions.

Approximately 8 miles road will be improved which includes grading, rocking, culvert replacement, spot rocking, potential sidecast pullback, and adding new culverts. This work will bring all roads up to standards described in *the Forest Roads Manual*.

There is no road construction planned for this sale. New roads may be built by the operator at the time of harvest and will be approved by the State through the Operations Plan. These will be short dead end spurs and closed or blocked after harvest.

Following harvest, roads within the sale areas will be reviewed for closure. Ground yarding roads will be closed and water-barred following harvest. See summary document for more information on this topic.

A combination of cable yarding systems (60%) and ground yarding (40%) will be used. Ground yarding will generally be limited to slopes under 35%.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct				
Improve		5	3	
Maintain ²		7		
Close/Block ³				
Vacate ³				

- 1. Additional roads may be built by the operator at the time of harvest and will be approved by the State through the Operations Plan. These will be short dead end spurs and closed or blocked after harvest*
- 2. All roads accessing the sale area will be maintained during the life of the timber sale contract. Maintenance miles in the table are those roads not being constructed or improved.*
- 3. Roads not closed/blocked or vacated at the end of the sale will be reviewed for closure after reforestation is established.*
- 4. The numbers in this table reflect planned Project Work associated with the sale.*

VII. AQUATIC RESOURCES AND WATER QUALITY:

Palmer Creek is a small Type F stream that is within Area 2. There are potentially additional unnamed small Type N streams within both of the sale areas. These streams will be located, reviewed, and protected appropriately during sale layout based on flow, topography, and terrain.

Oregon Department of Fish and Wildlife (ODFW) will be requested to complete stream surveys prior to sale layout. Streams of unknown status will be treated as Type F until surveys are completed to verify fish use.

Stream buffers within or adjacent to harvest unit boundaries will be managed according to *Forest Management Plan* Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

ODF will work with an ODFW fish biologist to identify possible stream enhancement project areas.

In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and monitoring logging and hauling operations. Culvert installment and replacement in live streams will be conducted between July 1 and September 15. Operations outside of this period will be reviewed with ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

The sale areas have been reviewed with the ODF Northwest Oregon Area Biologist.

It was determined that there is potential marbled murrelet habitat within and adjacent to the sale boundary.

Surveys have been and will be conducted during the 2005 and 2006 survey season for marbled murrelets. All surveys for marbled murrelet were and will be conducted in accordance with Pacific Seabird Group (PSG) protocol. At the completion of the 2005 survey season there have been no marbled murrelet detections.

The sale area is adjacent to Marbled Murrelet Management Areas (MMMAs). Seasonal restrictions will be required for some operations on this sale.

It was determined that there is potential northern spotted owl habitat within and adjacent to the sale boundary.

Surveys have been and will be conducted during the 2005 and 2006 survey season for northern spotted owls. All northern spotted owl surveys were and will be conducted in accordance with USFWS endorsed protocol. At the completion of the 2005 survey season there have been no northern spotted owl detections.

T & E Fish species: See Sections VII, and IX for listed fish protection measures.

T & E Plant species: The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known threatened or endangered listed plant locations as well as local records in the Land Management Classification System (LMCS). No listed plants were identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

There only a few steep slopes in the northern most portion of Area 1 and in the west central portion of Area 2. The initial hazard and risk assessment from the geotechnical specialist is moderate. The geotechnical specialist will be consulted during field to determine if a field visit is needed.

X. RECREATION RESOURCES:

The sale area is designated as non-motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator. No OHV trails were identified within or adjacent to the sale areas. Recreational use common to this area includes hiking, hunting, and horseback riding.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary.

XII. SCENIC RESOURCES:

The sale area has a visual classification of Level 2, moderate sensitivity. The sale will be reviewed by the Public Use Coordinator to determine methods to minimize visual impact. Visual impact will be minimal due to the amount of residual trees being left in the sale area because this sale is a partial cut.

XIII. OTHER RESOURCE CONSIDERATIONS:

There is a property line on the east portion of the Area 2 sale boundary. There are also 3 corners. These will be field located and protected from harvesting operations.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

This sale contains Focused Stewardship and Special Stewardship, Aquatic and Riparian Habitat. See Section VII, Aquatic Resources and Water Quality, for the management guidelines to be utilized.